

Claims:

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1. A method for diagnosing disease or a predisposition to disease comprising determining genotype of a NOS gene.

2. A method according to claim 1, comprising determining genotype of an inducible nitric oxide synthase (iNOS) gene.

3. A method according to claim 2, comprising determining genotype of a transcriptional control sequence of the iNOS gene.

4. A method according to claim 3, comprising determining genotype of a promoter region of the iNOS gene.

5. A method according to any of claims 1 to 4 comprising determining whether an individual is homozygous or heterozygous for a risk polymorphism in a NOS gene.

6. A method as in claim 5, wherein the risk polymorphism is a four base pair insertion located between positions -891 and -575 5' to the transcription start site in the promoter of the iNOS gene.

7. A method according to any previous claim for diagnosing Syndrome X or predisposition to Syndrome X, or a contributory component thereof.

8. A method according to claim 7 for the diagnosis of hypertension.

9. A method of diagnosis and treatment of hypertension comprising diagnosing hypertension or predisposition thereto according to claim 8, and treating an individual to reduce, prevent or otherwise ameliorate hypertension.

10. A method of predicting response to hypertension therapy, comprising

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diagnosing genotype of a NOS gene.

11. A method of diagnosing Syndrome X or predisposition to Syndrome X comprising screening the whole of or a part of an iNOS gene for a polymorphism in linkage disequilibrium with a polymorphism in or near the promoter region of an iNOS gene.
12. A method according to claim 11 for diagnosing hypertension or predisposition to hypertension.
13. A method of locating a further polymorphism correlated with a known polymorphism in or near the promoter region of an iNOS gene comprising:
 - (a) locating a further polymorphism and correlating it with the known NOS gene polymorphism; and
 - (b) testing whether the further polymorphism is linked to Syndrome X or any contributory component thereof.
14. A kit for diagnosis of predisposition or susceptibility to Syndrome X comprising:-
 - (a) one or more PCR primers for determining genotype of an NOS gene; and
 - (b) apparatus for correlating NOS genotype with risk of predisposition or susceptibility to disease.
15. A kit according to claim 14, wherein said apparatus comprises a set of reference markers.
16. A kit according to claim 14, wherein said apparatus comprises a reference gel.
17. A kit according to claim 14, wherein said apparatus comprises a reference chart.